

In the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-26. (Canceled)

27. (Currently amended) An isolated peptide which binds to a DM2 protein, which peptide comprises no more than 15 amino acids, and comprises an amino acid motif comprising at least the eight consecutive amino acids from F to R₄ of the formula



wherein

R₁ is a proline (P), leucine (L), glutamic acid (E), cysteine (C) or glutamine (Q),

X stands for any natural amino acid,

R₂ is arginine (R), histidine (H), or aspartic acid (D),

R₃ is histidine (H), phenylalanine (F) or tyrosine (Y),

R₄ is phenylalanine (F), glutamine (Q) or leucine (L); and

F is phenylalanine and W is tryptophan,

and inhibits the binding of said DM2 protein to a p53 protein.

28. (Previously presented) The peptide according to claim 27 wherein the peptide binds to human DM2 (HDM2).

29. (Previously presented) The peptide according to claim 27, which is coupled to a biotin moiety.

30. (Previously presented) The peptide according to claim 27, which is a cyclic peptide.

31. (Previously presented) The peptide according to claim 27, which is a cyclic lactam.

32. (Previously presented) The peptide according to claim 27 which comprises a disulfide bond.

33. (Canceled)

34. (Previously presented) The peptide according to claim 27 which comprises an amino acid motif selected from the group consisting of M-P-R-F-M-D-Y-W-E-G-L-N (SEQ ID NO: 6), Q-P-T-F-S-D-Y-W-K-L-L-P (SEQ ID NO: 7), and P-X-F-X-D-Y-W-X-X-L (SEQ ID NO: 8).

35. (Currently amended) An isolated peptide which comprises eight amino acids according to the formula

F-X2-R2-R3-W-X3-X4-R4 (Hb) (SEQ ID NO: 10)

wherein R2 is arginine (R), histidine (H), or aspartic acid (D);

R3 is histidine (H), phenylalanine (F), or tyrosine (Y);

R4 is phenylalanine (F), glutamine (Q) or leucine (L);

X2 is methionine (M), isoleucine (I), threonine (T), arginine (R), alanine (A) or serine (S);

X3 is glutamic acid (E), threonine (T), alanine (A), phenylalanine (F) or serine (S); and

X4 is glycine (G), glutamine (Q), threonine (T), alanine (A) or aspartic acid (D).

36. (Currently amended) The peptide according to claim 35 comprising an amino acid motif of the formula

X1-F-X2-R2-R3-W-X3-X4-R4 (He) (SEQ ID NO: 11)

wherein

R2 is arginine (R), histidine (H), or aspartic acid (D);

R3 is histidine (H), phenylalanine (F) or tyrosine (Y);

R4 is phenylalanine (F), glutamine (Q) or leucine (L);

X1 is arginine (R), asparagine (N), alanine (A), threonine (T), or valine (V);

X2 is methionine (M), isoleucine (I), threonine (T), arginine (R), alanine (A), or serine (S);

X3 is glutamic acid (E), threonine (T), alanine (A), phenylalanine (F), or serine (S); and

X4 is glycine (G), glutamine (Q), threonine (T), alanine (A), or aspartic acid (D).

37. (Canceled)

38. (Previously presented) The peptide according to claim 27, wherein R2 is aspartic acid (D).

39. (Previously presented) The peptide according to claim 35, wherein at least one of R2, X2, X3, and X4 is defined as follows: R2 is aspartic acid (D), X2 is methionine (M), X3 is glutamic acid (E), and X4 is glycine (G).

40. (Previously presented) The peptide according to claim 36, wherein at least one of R2, X1, X2, X3, and X4 is defined as follows: R2 is aspartic acid (D), X1 is arginine (R), X2 is methionine (M), X3 is glutamic acid (E), and X4 is glycine (G).

41. (Currently amended) A method for inhibiting the *in vitro* binding of a DM2 protein to a p53 protein comprising contacting said DM2 protein with a peptide *in vitro*, which peptide comprises an amino acid motif comprising at least eight consecutive amino acids of the formula

R₁-X-F-X-R₂-R₃-W-X-X-R₄ (±) (SEQ ID NO: 4)

wherein

R₁ is a proline (P), leucine (L), glutamic acid (E), cysteine (C) or glutamine (Q),

X stands for any natural amino acid,

R₂ is arginine (R), histidine (H), or aspartic acid (D),

R₃ is histidine (H), phenylalanine (F) or tyrosine (Y),

R₄ is phenylalanine (F), glutamine (Q) or leucine (L); and

F is phenylalanine and W is tryptophan,

and inhibits the binding of said DM2 protein to a p53 protein.

42. (Previously presented) The method of claim 41 wherein R2 is aspartic acid (D).

43-51. (Canceled)

52. (Currently amended) A composition comprising an isolated peptide, which peptide comprises an amino acid motif comprising at least eight consecutive amino acids of the formula



wherein

R_1 is a proline (P), leucine (L), glutamic acid (E), cysteine (C) or glutamine (Q),

X stands for any natural amino acid,

R_2 is arginine (R), histidine (H), or aspartic acid (D),

R_3 is histidine (H), phenylalanine (F) or tyrosine (Y),

R_4 is phenylalanine (F), glutamine (Q) or leucine (L); and

F is phenylalanine and W is tryptophan,

and inhibits the binding of said DM2 protein to a p53 protein, in admixture with at least one pharmaceutically acceptable carrier.